

REQUEST FOR A/E SERVICES

Seg. Unit Security Controls Replacement Fox Lake Correctional Institution (FLCI)

DFD PROJECT NO. 14E4A

Agency: Department of Corrections

Facility Location:
W10237 Lake Emily Rd.
Fox Lake, WI 53933

Introduction and Background:

Fox Lake Correctional Institution (FLCI) is an adult medium-security prison located North of Fox Lake, Wisconsin. It was originally opened in 1962.

The Segregation (Seg) Unit's Security Control system consists of manual push button switches built into three separate graphic panel layouts along with hardwired LED indicator lights. Replacement parts are difficult to find and replace.

The panel controls, except where noted below, are through a Simplex 4200 System with graphical interface boards. These controls need to be maintained and/or incorporated into a new touchscreen Graphical User Interface (GUI) which will facilitate less downtime and less maintenance. Panels operate, control, or display the following:

- Simplex fire alarm system alarms and troubles
- Sprinkler shutoffs
- Sliding doors with status
- Swing door locks and status
- Door status
- Lighting control both individual and groups
- Intercom system with microphones (PLC based)
- Sump pump operation and high water alarm
- Inmate phone system cutouts
- Camera selection (through Bosch Multiplexor)
- Inmate cell and shower water control (Bradley Micro-Touch, Bradley Touch-Time, and Pneumatic systems)

Scope of Services:

This project is to investigate and determine the scope of work for replacement of the existing control system; and to specify and design the replacement of the existing control system including the PLC's (if required), replacement of push button switch panels with new touchscreen GUI software controls, the programming and software necessary to ensure systems interface properly, new millwork for desk surface changes, and replacement of inmate cell and shower water control system that is now obsolete.

After completion of Preliminary Design Documents, DOC intends to go to the Building Commission to request approval to construct, and completion of design services. The same A/E who does the study will also complete all design services through construction.

Project Deliverables:

The State of Wisconsin is looking for an Architect/Engineering firm to provide complete technical consultation and preliminary design at FLCI as follows:

- Provide a Design Report following the DFD *Policy & Procedure Manual for Professional Services* format describing code analysis, budget costs and options for installation of control system, including PLC's, GUI based controls, and water control system, including life cycle analysis of options considered.
- Provide a detailed work plan to allow construction of recommendations to be completed with minimal disruption of security and inmate and staff daily activity.
- Provide a riser diagram of existing and proposed control systems. Risers should show all head-end equipment and networking devices.

Project Timeline:

In order to plan for timely evaluation of recommendations and planning for subsequent construction activity, the selected A/E will be expected to complete the study and submit a Design Report within two months of issuance of a Notice to Proceed.

Skills and Knowledge:

A qualified firm would have an appropriately staffed team with thorough knowledge, understanding, licensing and experience with the following:

- Evaluation and design of electronic door controls, including Wonderware and PLC programming.
- Evaluation and design of electronic water control systems.
- Standards for design and construction for state-owned correctional buildings.

PROJECT BUDGET/SCHEDULE:

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|-------------------|------------------|------------------------|-----------|
| Construction | \$ | SBC Project Approval | Dec 2014 |
| Design (8%) | \$ | A/E Selection | June 2014 |
| Management | \$ | Bid Opening | May 2015 |
| Contingency (15%) | \$ | Start Construction | June 2015 |
| TOTAL | \$475,000 | Substantial Completion | Nov 2015 |
| | | Final Completion | Dec 2015 |

Agency Contact:

Stanley Bethke – FLCI Buildings & Grounds Department